

# Student with hearing impairment in third level education: Support system applied at universities in Slovakia

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#### **ABSTRACT**

In recent decades, the ideal of inclusive education has become a priority idea of educational systems all over the world. The presented article deals with the current state of inclusion at universities in Slovakia. It describes the situation at the selected university in terms of support and help provided for students with specific needs. It represents a less discussed topic focused on the social and educational inclusion of students with hearing impairment. The aim of the contribution is to draw attention to the inclusion of students with hearing impairments in higher education, to offer theoretical definition and an analysis of the specifics of communication of the hearing-impaired students, as well as to monitor the impact of the impairment on education. A short description about Erasmus + project focused on inclusion within third level education institution of three joint countries is also part of the presented paper.

**Keywords:** Inclusion; Student with specific needs; Student with hearing impairment; Student support; Project.

## 1. Introduction

Inclusion in education has become a topic not only discussed by experts, teachers, psychologists, sociologists, but also a topic strongly politicized and subsequently publicly mediatized. However, the understanding of inclusion is far from unanimous, not even among erudite professionals or academic personalities (Slowik, 2018). Successful inclusion of students with hearing impairment requires working together to ensure that all participants of third level education feel welcome and valued and receive the right support to help them develop their talents and achieve their goals (Sender et al., 2023). Inclusive education was originally developed for younger pupils, prior to its application within higher education. But as more students with disabilities completed their high schooling, the need to move towards inclusive practices within universities has increased (Moreno et al., 2016).

The university, whether it is private, or public should create academic conditions for students with specific needs without reducing the demands of their academic performance. Workplaces, called Support Centres, are established at universities to help students with specific needs according to §100 of Act on universities and on Amendments to Certain Acts no. 131/2002 Collection of Law of The Slovak Republic. Coordinators are also involved in supporting and helping students with specific needs. If the coordinator is a legal entity is authorized by the rector and can act as a coordinator at several universities. If the coordinator is a natural person, he works at the faculty and is authorized by the dean of the faculty. A condition for the performance of this function are an acquired university education in the fields of special pedagogy, social work, or psychology and the use of the education in practice. According to §100 par. 5 of Act No. 131/2002 Coll. on higher education institutions and on amendments to later regulations, a student with specific needs is considered a student: "with a sensory or physical disability, with a chronic illness, with impaired health, with a mental illness, with autism and other pervasive needs and with learning disabilities."

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The binding document as part of the provision of support to students with specific needs is the Decree of the Ministry of Education of the Slovak Republic no. 458/2012 Coll. on the minimum requirements of a student with a disability. The given decree generally describes the requirements that apply to material requirements, spatial requirements and study-related requirements that must be ensured for students as part of the adjustment of the university's environment. However, according to Ceresnova et al. (2018), it should be elaborated in more detail regarding individual types of students with specific needs.

Inclusion is an ideal within education (O'Hanlon, 2003), which we also strive to achieve within Slovak universities. However, there are still barriers in education at universities, namely for example negative attitudes towards students with specific needs, insufficient understanding of various needs, limited knowledge or lack of willingness or time on the part of coordinators, or physical barriers. However, for students with physical or sensory disabilities, the issue of accessibility is crucial. These students should have access to the classrooms, where the education takes place, but they should also be able to get to the library or study rooms, as well as accommodation and catering facilities. They should be able to move around the premises of the educational institution independently, without the help of an assistant (Ceresnova et al., 2018). According to Bagalova et al. (2015, p.7), the biggest barrier in creating an inclusive environment is "general lack of information and misunderstanding of the concept of inclusion."

In inclusive pedagogy the concept of acceptance of heterogeneity and diversity, dominates. The term heterogeneity does not have to be understood only in the dimension of joint education of individuals with disabilities together with intact ones. Strnadova and Hajkova (2010) understand heterogeneity in a broader sense of age, language, religious or ethnic heterogeneity. For example, in higher education in Asia, the term "diversity" is used, when all students regardless of nationality, ethnicity, language, gender, sexuality, value system, socio-economic context, age, abilities, education and learning styles are educated together and enrich each other. A diverse environment can ensure that communication and argumentation skills improve, critical thinking and problem solving are also developed, and finally, this type of inclusive learning contributes to emotional intelligence, or developing empathy in students (Sanger & Gleason, 2020).

We will reach the given concept of inclusion when all interested parties have a common vision regarding inclusive education. Sender and Polackova (2022) claim that there is no consensus in Slovakia about the nature, meaning and feasibility of inclusive education because no political demand for inclusive education was announced. However, according to the current wording of Act No. 245/2008 Coll. of the Education and Training Act (School Act) with effect from 1 January 2023, the term inclusive education is defined in § 2 among the basic terms. Inclusive education according to Act no. 45/2008 Coll. on education in §2 letter ai) means: "joint education of children, pupils, students or participants in education, carried out on the basis of opportunity and respect for their educational needs and individual characteristics and supporting their active involvement in the educational activities of the school or school facility." We believe that the concept of inclusive education will soon be defined in the Higher Education Act as well.

The University of Constantine the Philosopher in Nitra (CPU) approved the internal regulation to ensure a generally accessible academic environment for students with specific needs number 28/2015 in accordance with Art. § 100 of Act no. 131/2002 Coll. on universities and on the amendment of certain laws as amended (hereinafter referred to as "the law on universities").

CPU creates a generally accessible academic environment and appropriate study conditions for students with specific needs without reducing the requirements for their academic performance. For this purpose, it takes the following steps:

- increase the accessibility of studies for students with specific needs;
- remove barriers created by the physical, academic, and cultural environment and prevent the creation of new barriers;
- compensate the consequences of existing barriers in the academic environment by applying appropriate adjustments and providing support services to students with specific needs.

This internal regulation regulates the principles of a generally accessible academic environment for students with specific needs, the concept, classification, and responsibility of students with specific needs, the responsibility of CPU in ensuring an accessible academic environment for students with specific needs, the scope and tasks of the coordinator, faculty coordinators and the Student Centre, specifically Counselling and



Support Centre for Students with Specific Needs. CPU is responsible for ensuring adequate conditions for the study of students with specific needs. Academic and technical support is organized primarily through:

- university coordinator for students with specific needs;
- The Student Centre, namely Counselling and Support Centre for Students with Specific Educational Needs;
- faculty coordinators.

Each CPU faculty has a faculty coordinator. Based on the decision of the dean of the relevant CPU faculty, the faculty may have several coordinators. Based on the agreement of the management of individual faculties, one coordinator can work in several faculties. The faculty coordinator is usually a university teacher. The dean of the relevant CPU faculty entrusts him with the performance of his activities. Centralized consultancy offers services in the following areas:

- career counselling and career education;
- psychological counselling;
- counselling and support for students with specific needs;
- financial counselling focused on scholarships and student's loans;
- health counselling.

Additional services of the support centre are:

- counselling and consultations in the field of study;
- consultations on admission and administration of records of students with specific needs;
- help in the library when working with catalogues;
- counselling for drawing up an individual schedule for fulfilling study obligations;
- assistance in compiling and solving schedule actions;
- recording notes of lectures and seminars;
- scan and copy notes and teaching texts;
- counselling for teachers;
- helping with audio recordings of lectures and seminars;
- · translation of teaching texts into audio form;
- rental of aids, assistive technology, and consultancy;
- interpreting into sign language;
- counselling for teachers, for working with a blind student.

For the purposes of evaluating the specific needs of students and subsequently awarding appropriate adjustments during their studies and providing support during their studies, as well as for the purposes of records, students with specific needs must be characterized in accordance with the Annex to the Decree of the Ministry of Education and Culture of the Slovak Republic No. 458/2012 Coll. of the minimum requirements of a student with specific needs as follows:



Table 1. Categorization and definition of specific needs

Group	Code and definition
A1	1 – blind student 2 – visually impaired student
B2	3 – deaf student 4 – student with hearing impairment
C1	5 – student with lower limb disability
C2	6 – student with upper limb disability
D	10 – student with autism or other pervasive developmental disorders 11 – student with learning disabilities
E	7 – student with a chronical illness 8 – student with a health disability 9 – student with mental illness

Source: Sender and Polackova (2022)

The number of students with specific needs at universities has been on the rise since 2015. Data from the period before 2015 are not available, it is assumed that such a student appeared at almost every university in Slovakia, support and assistance were set individually through an individual study program. By analysing the descriptive method, we concluded that in the last two years, due to the pandemic situation, the number of registered students has stabilized from academic year 2018/2019.

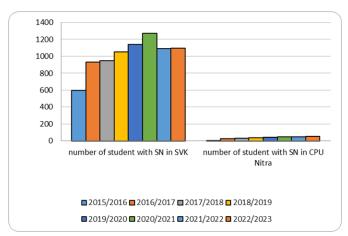
Table 2. Number of students with specific needs at third level education in Slovakia and at CPU

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Number								
of								
students	596	932	948	1054	1137	1270	1090	1098
with SN								
in SVK								
Number								
of								
students	3	25	33	39	44	47	48	53
with SN	3	25	33	39	44	41	40	55
in CPU								
Nitra								

Source: Author's own work



Graph 1. Number of students with specific needs at third level education in Slovakia and at CPU



Source: Author's own work

Analysing the graph above (Graph 1), we notice that the number of registered students with specific needs at CPU in Nitra is stable, it has had a growing tendency since 2015. The year 2021, as mentioned above, was more demanding for students due to the transition from full-time teaching to distance learning, which was reflected in a lower number of students with special needs. Many students have interrupted their studies or dropped out of university for a variety of reasons.

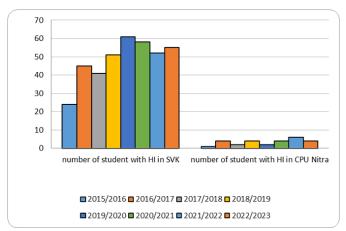
Table 3. Number of students with hearing impairment in Slovakia and at SPU

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Number								
of								
students	24	45	41	51	61	58	52	55
with HI								
in SVK								
Number								
of								
students	1	4	2	4	2	4	6	4
with HI	1	4	2	4	2	4	б	4
in CPU								
Nitra								

Source: Author's own work



Graph 2. Number of students with hearing impairments at third level education in Slovakia and at CPU



Source: Author's own work

As it can been seen from the tables, the most frequently established groups are students from the category of sensory disabilities A, B, C (blind student, deaf student, and student with physical disability). In in the following subsections, we will describe the category of students with hearing impairments in more detail.

#### 2. Student with hearing impairment at third level education in Slovakia

Hearing is one of the greatest importance for a person, especially in communication, establishing contacts and maintaining relationships. According to Ludikova and Kozakova (2012) hearing is "a fundamental importance for the development of speech, language and thinking, the development of the psyche, for the support of an emotional connection with the environment and in the acquisition of physical skills." A student with hearing impairments can communicate in different ways. Tarcsiova and Dzurilova (2005) distinguishes three groups of communication forms. They primarily relate to the use of spoken language, sign language or written form of speech. The author considers mirroring (visual perception of speech) or non-verbal communication (mimicry, gestures), which are related to spoken language or sign language, to be secondary forms of communication. When communicating, a student with a hearing impairment can also use residual hearing through a hearing aid. Or they can communicate through several forms already mentioned above. This depends on the type and degree of disability. In the case of hard of hearing students, even if there is a violation of auditory perception, it can be assumed that they will use headphones or a cochlear implant and will prefer spoken speech or lip reflection when communicating with the hearing. In the case of deaf students whose hearing function was more severely impaired, they will communicate more through sign language (Horakova, 2012).

### 2.1. Recommended support measures for deaf and hard of hearing students:

- When communicating with a deaf student, it is important to maintain eye contact. When watching, it is important that the student has a good view of the teacher, it is not advisable to cover the face with hands or other objects. Mimicry and gesticulation can help to understand the meaning of spoken speech. The teacher should minimize walking around the classroom during the lecture because the volume of the speaker's speech fluctuates, the student thus loses the opportunity to use the remnants of hearing and visual support as well.
- When adjusting the environment, it is important to set the appropriate lighting for better visibility. It is also necessary to ensure good acoustic quality of the room to eliminate ambient sounds that can disturb students.



- The service of interpreting into sign language is used mainly by deaf students. In the case of the presence of an interpreter, attention should be paid to the student. When speaking, the teacher should look at the student to show his interest in his opinions.
- For the education of the deaf and hard of hearing students, it is recommended to provide materials and a list of literature on the given subject in advance.
- Completion of study tasks according to an individual schedule, which unfolds under predetermined conditions, is considered appropriate support for a student with hearing impairments.
- In the case of a more complex topic, it is necessary to check whether the student has understood the material covered. If the student did not understand the given information, it is important not to repeat the same sentence but to try to explain the idea in a different way.
- Deaf students may have problems understanding complicated grammar, so it is advisable to speak and write concisely, use commonly known words, and avoid foreign expressions, jargon, and ambiguous terms.
- It is characteristic for the written speech of the deaf students that they use basic forms without inflection, timing, or non-standard word order. They may also make a lot of grammatical mistakes, but that doesn't mean they didn't understand the topic being discussed.
- Book borrowing is provided to hearing impaired students for a longer period.
- For the deaf, it is advisable to adapt the assignment, adapt the wording of the assignment to the student's understanding, or if possible, use an interpreter to explain or interpret the assignment. Sometimes, however, it is more appropriate for the exam to be conducted in sign language, which depends on the teacher's decision.
- Finally, it is important to provide enough time to prepare assignments, seminar papers, or take an exam (Bittmannova, 2019; Seidler, Belikova & Dufekova, 2013; Decree of the Ministry of Education of the Slovak Republic No. 458/2012; Caplanova et al., 2021).

Academic support during studies is mainly focused on providing proposals for appropriate adjustments and providing support services during studies and individual evaluation of the extent of support for students with specific needs, as well as assistance in providing interpreter services for the deaf. Intervention and therapy services are aimed at addressing specific learning disabilities. Technical support is aimed at providing suitable technical equipment, providing study literature in an accessible form, assistance in providing interpreter services for the deaf, providing assistive technologies according to the type of disability, and the like.

# 3. Conclusion

The current situation in Slovakia indicates the lack of academic engagement with inclusion as it relates to disabled students, non-academic, and academic staff. This is troubling, but also an opportunity. There are various tools that can help inclusive endeavours to make visible the problems disabled people and other inclusive linked groups face. Constantine the Philosopher University in Nitra (CPU) has joined an international project, the main goal of which is to create a comprehensive online course for consultants, coordinators, and academics. The course will offer information on how to approach students with specific needs. This course then can be modified to cover ability diversity, ability privilege, and ability bias. Various ability expectation exercises could be used to reveal unconscious ability biases and ability privilege biases. As such, we hope, it will be useful tool to make people realize the existence of ability based and other biases within themselves and others (Wolbring & Lillywhite, 2021). CPU recognises that the struggle with inclusive education reflects wider societal inequities. Using existing stories, creating new ones, and thus rewriting the dominant story is the key area behind the project titled "Changing Our Story: The Pursuit of Inclusive Education". The project address both the needs of higher education staff and the needs of students. We are aware that there are students who face different challenges within our institution and some who do not receive adequate support. There is awareness that there is a need to make systematic changes so all students can be supported to best of their abilities. The project contributes to sustainable skill development and the creation of a safe, inclusive



environment through specific staff training and the inclusion of student and community voices. Rather than the standard invention-oriented approach, the concepts of stories is used, which is an old, yet innovative tradition within inclusion work. We find it crucial in improving the transition of students into third level education and preventing the high dropout rates of students with disabilities.

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